

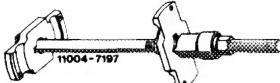
## 33-512 Removal, disassembly, assembly and installation of lower control arm

Tightening torques	Nm
Hex nut of supporting joint	80
Eccentric bolt of lower control arm bearing	180
Hex nut of track rod ball joint	35
Twelve-point screws of lower shock absorber suspension	20
Hex bolts for attaching brake support to frame floor	35
Hex bolts for attaching spring disc to lower control arm	20
Fitted hex bolt for attaching brake support to lower control arm	M 10 <sup>1</sup> ) 70
	M 12 x 1,5 <sup>2</sup> ) 105
Hex bolt for attaching clamp to supporting pipe	20

<sup>1)</sup> 1st version (up to December 1976). For repairs, use screws M 12 x 1.5 only.

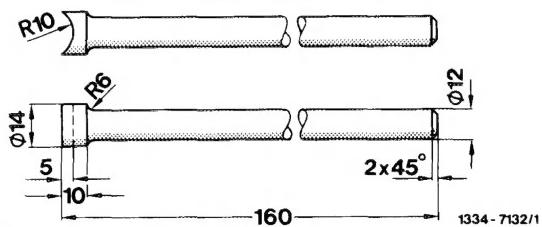
<sup>2)</sup> 2nd version (starting January 1977).

### Special tools

Puller for ball joint of track rod	 11004-7198	186 589 10 33 00
Spring tensioner for front spring	 11004-7197	116 589 06 31 00
Pipe socket wrench insert 24 mm 1/2" square for spring tensioner	 11004-7099	116 589 01 09 00
Remover for supporting joint	 11004-7199	116 589 09 33 00
Wrench for upper shock absorber suspension	 11004-7095	107 589 00 09 00

## Self-made tools

Adjusting gauge for basic adjustment of caster



Spacing plate

refer to illustration  
item 17

## Notes

Tighten eccentric bolt of lower control arm bearing only when vehicle is resting on its wheels ready for driving. If this bearing is tightened without load on wheels, wrong values for control arm position would result.

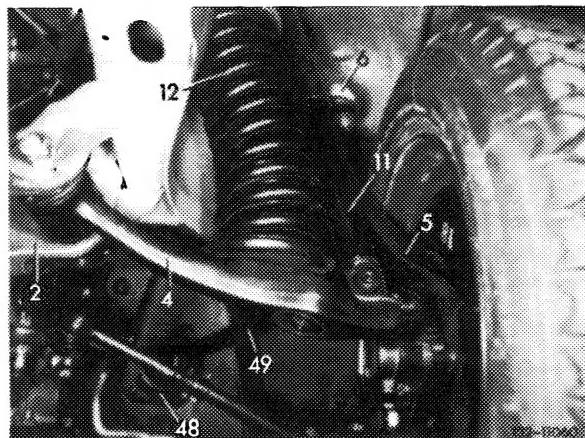
The front shock absorber serves simultaneously as a deflection stop of front wheel. For this reason, release shock absorber suspension only when the vehicle is resting on its wheels or when the lower control arm is supported. With the shock absorber released, the upper control arm rests on end stop at front end. For assembly of upper suspension, either place vehicle on its wheels or lift axle half at lower control arm. Replace self-locking bolts and nuts on principle.

## Removal

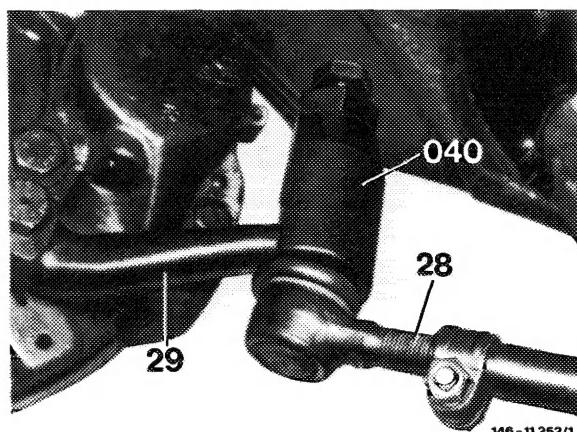
1 Remove front shock absorber (11), while making sure that the upper shock absorber suspension is loosened first (32–100).

2 Jack-up vehicle at the front, remove front wheel.

3 Remove front spring (12) (32–200).

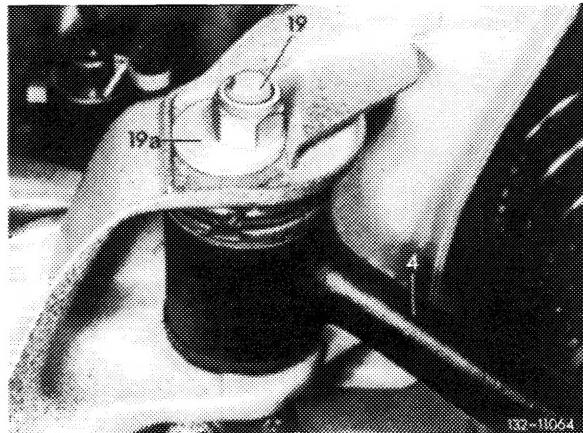


4 Loosen track rod on steering knuckle arm and remove.

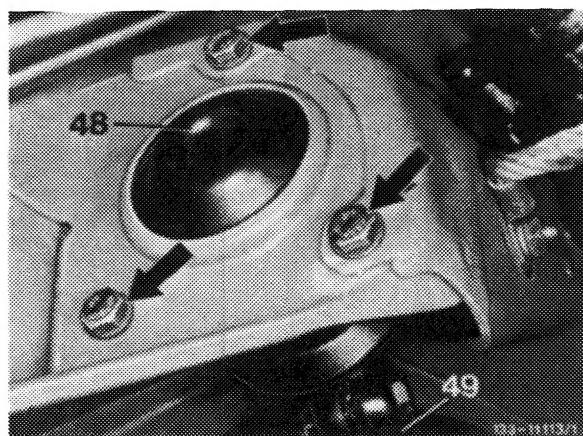


28 Track rod  
29 Steering knuckle arm  
040 Puller

**5** Mark position of eccentric bolt for frame cross member on bearing of lower control arm.

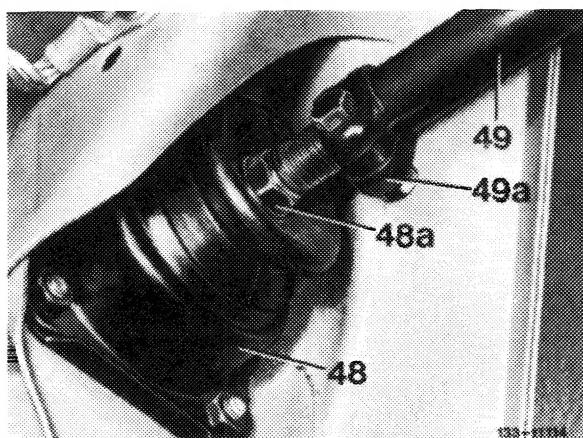


**6** Unscrew hex bolts (refer to arrows) for attaching brake support to frame floor.

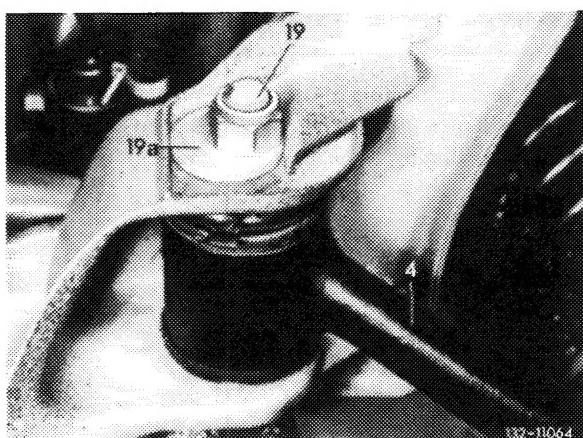


Brake support on frame floor

48 Supporting joint  
48a Ball pin  
49 Supporting tube  
49a Clamp



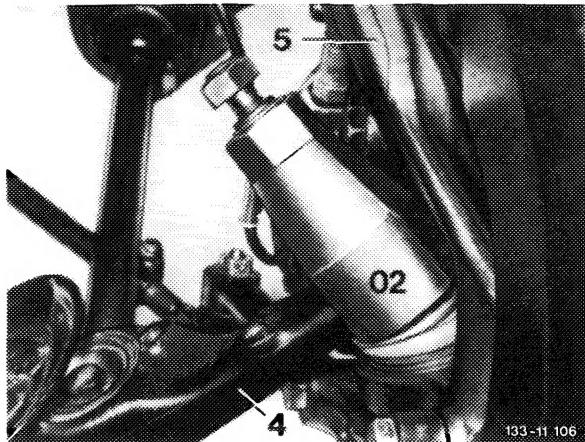
**7** Loosen eccentric bolt (19) at bearing of lower control arm and unscrew.



8 Force supporting joint from lower control arm.

9 Remove lower control arm with brake support.

4 Lower control arm  
5 Steering knuckle  
02 Remover

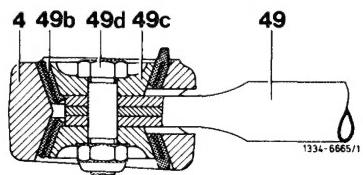


### Disassembly

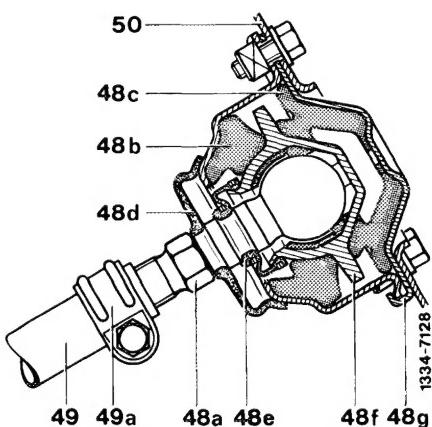
10 Loosen hex bolts for attaching spring disc and remove spring disc.

11 Loosen fitted hex bolt of brake support bearing, remove supporting tube.

4 Lower control arm  
49 Supporting tube  
49b Rubber bearing  
49c Disc washer  
49d Fitted hexagon bolt

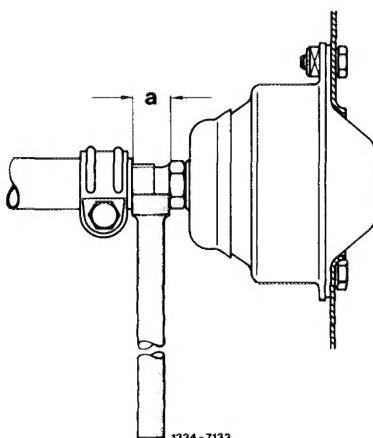


12 Loosen clamp (49a) on supporting tube, unscrew supporting joint by turning ball pin (48a).



### Assembly

13 Screw supporting joint into supporting tube, and adjust distance "a" between hexagon head on ball pin and supporting tube for basic adjustment of caster.



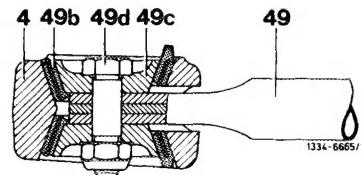
**14** Mount supporting tube with new rubber bearings to lower control arm, making sure that the supporting tube rests in cutouts of rubber bearings and that the opening of the clamp is facing downwards.

**Note:** Prior to installing a new lower control arm, provide arm with paint.

Do not yet tighten fitted hexagon bolt.

**15** Attach spring disc with new self-locking hex bolt.

4 Lower control arm  
49 Supporting tube  
49b Rubber bearing  
49c Disc washer  
49d Fitted hexagon bolt



## Installation

**16** Mount control arm to supporting joint.

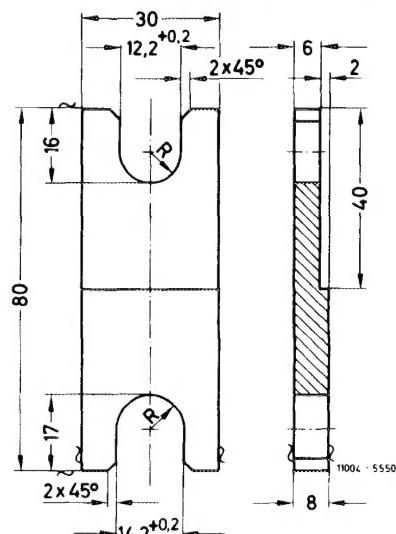
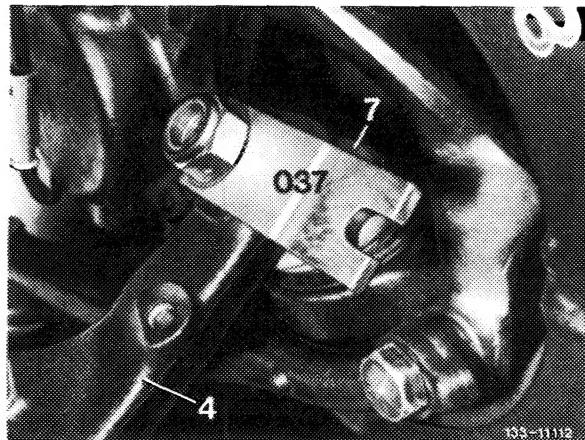
### Attention!

Use new self-locking hex nut.

**17** If ball pin is turning along on supporting joint when tightening hex nut, insert spacing plate (037) and pull cone of ball pin into control arm when tightening hex nut.

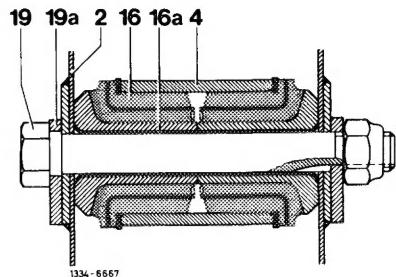
Then tighten hex nut to specified torque.

The spacing plate can be self-made.



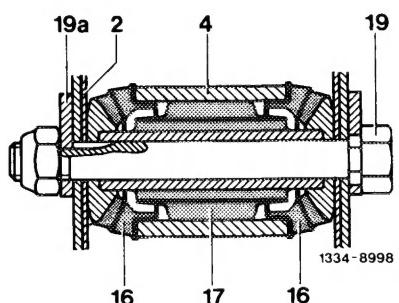
**18 Mount bearing of lower control arm to frame cross member.**

2 Frame cross member  
 4 Lower control arm  
 16 Rubber bearing  
 16a Clamping sleeve  
 19 Eccentric bolt  
 19a Eccentric disc



**Note:** On vehicles with 15" wheels, 3-part rubber bearings (known from model 126) will be standard starting January 1982 (33-520).

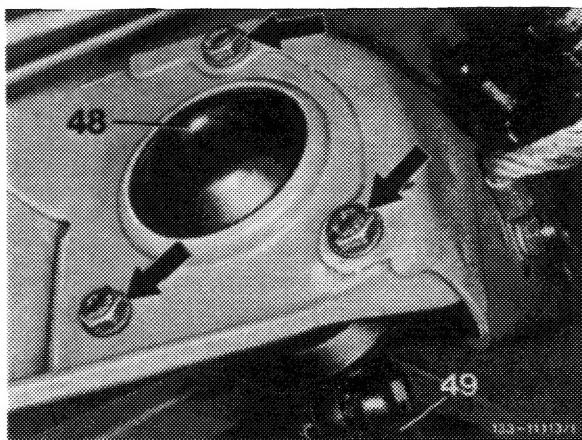
2 Frame cross member  
 4 Lower control arm  
 16 Axial-torsion rubber bearing  
 17 Radial-torsion rubber bearing  
 19 Eccentric bolt  
 (camber adjustment)  
 19a Eccentric disc



**19 Fasten brake support to frame floor. Tightening torque 35 Nm.**

**20 Tighten hex. head fitted screw of brake support bearing on lower control arm to specified torque.**

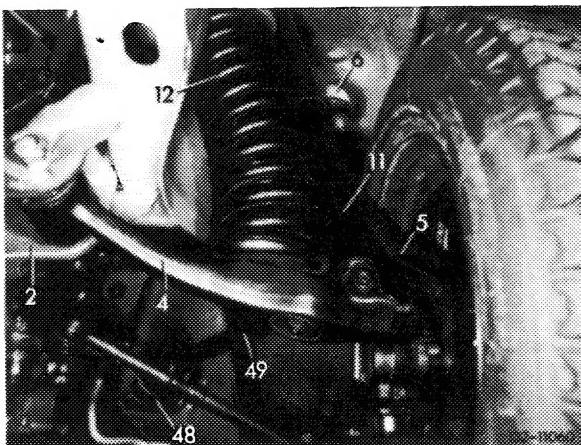
48 Supporting joint  
 49 Supporting tube



**21 Install front spring (12) (32-200).**

**22 Mount front shock absorber (11) (32-100).**

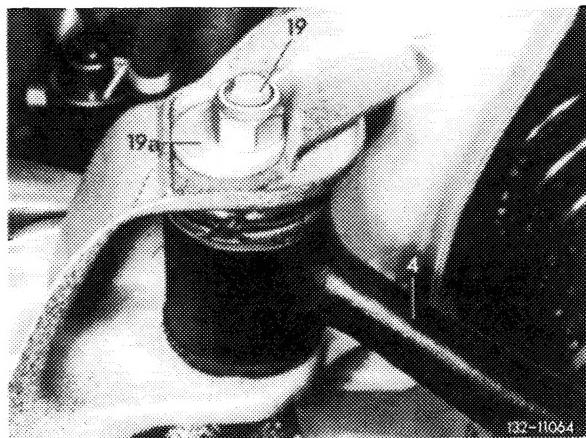
**23 Mount front wheel, lower vehicle.**



24 Set eccentric bolt of camber adjustment to previously applied mark and tighten.

**Attention!**

If the position of the eccentric bolt has not been marked during removal, move eccentric bolt into center position for initial adjustment.



25 Mount track rod to steering knuckle arm (46–540).

26 Check vehicle level at front axle (40–300).

27 Check adjustment of front wheels (40–320).

28 Check adjustment of headlights.